SEQUENCE LISTING

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Dzionek, Andrzej
Buck, David William

<120> ANTIGEN BINDING FRAGMENTS SPECIFIC FOR DENDRITIC CELLS COMPOSITIONS AND METHODS OF USE THEREOF ANTIGENS RECOGNIZED THEREBY AND CELLS OBTAINED THEREBY

<130> 212302001100

<140> US 09/714,712
<141> 2000-11-15

<150> US 60/197,205
<151> 2000-04-13

<150> US 60/196,824
<151> 2000-04-11

<150> US 60/180,775
<151> 2000-02-07

<150> US 60/179,003
<151> 2000-01-28

<150> US 60/167,076
<151> 1999-11-23

<150> US 60/165,555
<151> 1999-11-15

<160> 38

<170> PatentIn version 3.0

<210> 1
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<212> DNA
<213> Homo sapiens

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<221> misc_feature
<222> (1)..(1312)
<223> BDCA-2 cDNA sequence

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ttgaactcct ggcctgaagc aatccgccca cctcagcctc ccaaagtgct gagattatag 180

gcacgagcca ctacacctgg ccacaaaatt ctttaaagaa gccaatccca tcctccctca 240

agagccaagg ggccacctca ccctcttgtt acagcagatc ctgcctccac agtcaccctg 300

ctcccaagtg caacctctgt ctgaccctgc atggtgtgcg gtgccctcct gcctcaggcc 360

gcgaagaagg atctaagggc ttggcttgtt tgaaagaacc acaccccgaa agtaacatct 420

ttggagaaag tgatacaaga gcttctgcac ccacctgata gaggaagtcc aaagggtgtg 480

cgcacacaca atggtgcctg aagaagagcc tcaagaccga gagaaaggac tctggtggtt 540

ccagttgaag gtctggtcca tggcagtcgt atccatcttg ctcctcagtg tctgtttcac 600

tgtgagttct gtggtgcctc acaattttat gtatagcaaa actgtcaaga ggctgtccaa 660

gttacgagag tatcaacagt atcatccaag cctgacctgc gtcatggaag gaaaggacat 720

agaagattgg agctgctgcc caacccctg gacttcattt cagtctagtt gctactttat 780

ttctactggg atgcaatctt ggactaagag tcaaaagaac tgttctgtga tgggggctga 840

tctggtggtg atcaacacca gggaagaaca ggatttcatc attcagaatc tgaaaagaaa 900

ttcttcttat tttctggggc tgtcagatcc agggggtcgg cgacattggc aatgggttga 960

ccagacacca tacaatgaaa atgtcacatt ctggcactca ggtgaaccca ataaccttga 1020

tgagcgttgt gcgataataa atttccgttc ttcagaagaa tggggctgga atgacattca 1080

ctgtcatgta cctcagaagt caatttgcaa gatgaagaag atctacatat aaatgaaata 1140

ttctccctgg aaatgtgttt gggttggcat ccaccgttgt agaaagctaa attgattttt 1200

taatttatgt gtaagttttg tacaaggaat gcccctaaaa tgtttcagca ggctgtcacc 1260

tattacactt atgatataat ccaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1312

<210> 2
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<212> PRT
<213> Homo sapiens

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<223> amino acid sequence of one of the isoforms of BDCA-2 with all six exons expressed

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Phe Gln Leu Lys Val Trp Ser Met Ala Val Val Ser Ile Leu Leu Leu
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Ser Val Cys Phe Thr Val Ser Ser Val Val Pro His Asn Phe Met Tyr
        35                  40                  45

Ser Lys Thr Val Lys Arg Leu Ser Lys Leu Arg Glu Tyr Gln Gln Tyr
    50                  55                  60

His Pro Ser Leu Thr Cys Val Met Glu Gly Lys Asp Ile Glu Asp Trp
65                  70                  75                  80

Ser Cys Cys Pro Thr Pro Trp Thr Ser Phe Gln Ser Ser Cys Tyr Phe
                85                  90                  95

Ile Ser Thr Gly Met Gln Ser Trp Thr Lys Ser Gln Lys Asn Cys Ser
            100                 105                 110

Val Met Gly Ala Asp Leu Val Val Ile Asn Thr Arg Glu Glu Gln Asp
        115                 120                 125

Phe Ile Ile Gln Asn Leu Lys Arg Asn Ser Ser Tyr Phe Leu Gly Leu
    130                 135                 140

Ser Asp Pro Gly Gly Arg Arg His Trp Gln Trp Val Asp Gln Thr Pro
145                 150                 155                 160

Tyr Asn Glu Asn Val Thr Phe Trp His Ser Gly Glu Pro Asn Asn Leu
                165                 170                 175

Asp Glu Arg Cys Ala Ile Ile Asn Phe Arg Ser Ser Glu Glu Trp Gly
            180                 185                 190

Trp Asn Asp Ile His Cys His Val Pro Gln Lys Ser Ile Cys Lys Met
        195                 200                 205

Lys Lys Ile Tyr Ile
    210
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<223> coding sequence of mouse Dectin-2

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<309> 2000-05-02
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cctctttgac agaagccagg tccctgagtc gtattttgga gacagatgca agaaacccct 120

gaccttctga acatacacct caaca atg gtg cag gaa aga caa tcc caa ggg 172
Met Val Gln Glu Arg Gln Ser Gln Gly
1 5

aag gga gtc tgc tgg acc ctg aga ctc tgg tca gct gct gtg att tcc 220
Lys Gly Val Cys Trp Thr Leu Arg Leu Trp Ser Ala Ala Val Ile Ser
10 15 20 25

atg tta ctc ttg agt acc tgt ttc att gcg agc tgt gtg gtg act tac 268
Met Leu Leu Leu Ser Thr Cys Phe Ile Ala Ser Cys Val Val Thr Tyr
30 35 40

caa ttt att atg gac cag ccc agt aga aga cta tat gaa ctt cac aca 316
Gln Phe Ile Met Asp Gln Pro Ser Arg Arg Leu Tyr Glu Leu His Thr
45 50 55

tac cat tcc agt ctc acc tgc ttc agt gaa ggg act atg gtg tca gaa 364
Tyr His Ser Ser Leu Thr Cys Phe Ser Glu Gly Thr Met Val Ser Glu
60 65 70

aaa atg tgg gga tgc tgc cca aat cac tgg aag tca ttt ggc tcc agc 412
Lys Met Trp Gly Cys Cys Pro Asn His Trp Lys Ser Phe Gly Ser Ser
75 80 85

tgc tac ctc att tct acc aag gag aac ttc tgg agc acc agt gag cag 460
Cys Tyr Leu Ile Ser Thr Lys Glu Asn Phe Trp Ser Thr Ser Glu Gln
90 95 100 105

aac tgt gtt cag atg ggg gct cat ctg gtg gtg atc aat act gaa gcg 508
Asn Cys Val Gln Met Gly Ala His Leu Val Val Ile Asn Thr Glu Ala
110 115 120

gag cag aat ttc atc acc cag cag ctg aat gag tca ctt tct tac ttc 556
Glu Gln Asn Phe Ile Thr Gln Gln Leu Asn Glu Ser Leu Ser Tyr Phe
125 130 135

ctg ggt ctt tcg gat cca caa ggt aat ggc aaa tgg caa tgg atc gat 604
Leu Gly Leu Ser Asp Pro Gln Gly Asn Gly Lys Trp Gln Trp Ile Asp
140 145 150

gat act cct ttc agt caa aat gtc agg ttc tgg cac ccc cat gaa ccc 652
Asp Thr Pro Phe Ser Gln Asn Val Arg Phe Trp His Pro His Glu Pro
155 160 165

aat ctt cca gaa gag cgg tgt gtt tca ata gtt tac tgg aat cct tcg 700
Asn Leu Pro Glu Glu Arg Cys Val Ser Ile Val Tyr Trp Asn Pro Ser
170 175 180 185

aaa tgg ggc tgg aat gat gtt ttc tgt gat agt aaa cac aat tca ata 748
Lys Trp Gly Trp Asn Asp Val Phe Cys Asp Ser Lys His Asn Ser Ile
190 195 200

tgt gaa atg aag aag att tac cta tga gtgcctgtta ttcattaata 795
Cys Glu Met Lys Lys Ile Tyr Leu
205

tctttaaagt tcagacctac caagaagcca taacttcttg gcctgtacat ctgacagagg 855

ccgttctttt cctagccact attctttact caaacagaat gagccctttc tccttctgat 915

ggttagagtt ttgtcaactt gacacaaact agagtcacct ggggagtagg atcttcagct 975

aaggaattgc ctctgtcagc ttgaccagtc agcatgtctg ggggcatttt cttgattaat 1035

gattgttgta agagggtcca ggtggtaagc aaaggtgtta aacccatgaa gagcaagcca 1095

gggagcatca tccatccatc tctgccctca ggtttctgcc ccagggtctt gccctggttt 1155

ctttctatga actgctgtta cttgaaagta taagatgaat aaacaatttc atccaaaaaa 1215

aaaaaaaaaa aa 1227

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<213> Mus musculus

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Met Val Gln Glu Arg Gln Ser Gln Gly Lys Gly Val Cys Trp Thr Leu
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Arg Leu Trp Ser Ala Ala Val Ile Ser Met Leu Leu Leu Ser Thr Cys
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Phe Ile Ala Ser Cys Val Val Thr Tyr Gln Phe Ile Met Asp Gln Pro
35 40 45

Ser Arg Arg Leu Tyr Glu Leu His Thr Tyr His Ser Ser Leu Thr Cys
50 55 60

Phe Ser Glu Gly Thr Met Val Ser Glu Lys Met Trp Gly Cys Cys Pro
65 70 75 80

Asn His Trp Lys Ser Phe Gly Ser Ser Cys Tyr Leu Ile Ser Thr Lys
85 90 95

Glu Asn Phe Trp Ser Thr Ser Glu Gln Asn Cys Val Gln Met Gly Ala
100 105 110

His Leu Val Val Ile Asn Thr Glu Ala Glu Gln Asn Phe Ile Thr Gln
115 120 125

Gln Leu Asn Glu Ser Leu Ser Tyr Phe Leu Gly Leu Ser Asp Pro Gln
130 135 140

Gly Asn Gly Lys Trp Gln Trp Ile Asp Asp Thr Pro Phe Ser Gln Asn
145 150 155 160

Val Arg Phe Trp His Pro His Glu Pro Asn Leu Pro Glu Glu Arg Cys
165 170 175

Val Ser Ile Val Tyr Trp Asn Pro Ser Lys Trp Gly Trp Asn Asp Val
180 185 190

Phe Cys Asp Ser Lys His Asn Ser Ile Cys Glu Met Lys Lys Ile Tyr
195 200 205

Leu

<210> 5
<211> 237
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<213> Homo sapiens

<220>
<221> UNSURE
<222> (1)..(237)
<223> amino acid sequence of human DCIR

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<308> AJ133532
<309> 1999-09-01
<313> (1)..(237)

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Lys Ser Ser Gly Ile Asn Thr Ala Ser Ser Ala Ala Ser Lys Glu Arg
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Thr Ala Pro His Lys Ser Asn Thr Gly Phe Pro Lys Leu Leu Cys Ala
35 40 45

Ser Leu Leu Ile Phe Phe Leu Leu Leu Ala Ile Ser Phe Phe Ile Ala
50 55 60

Phe Val Ile Phe Phe Gln Lys Tyr Ser Gln Leu Leu Glu Lys Lys Thr
65 70 75 80

Thr Lys Glu Leu Val His Thr Thr Leu Glu Cys Val Lys Lys Asn Met
85 90 95

Pro Val Glu Glu Thr Ala Trp Ser Cys Cys Pro Lys Asn Trp Lys Ser
100 105 110

Phe Ser Ser Asn Cys Tyr Phe Ile Ser Thr Glu Ser Ala Ser Trp Gln
115 120 125

Asp Ser Glu Lys Asp Cys Ala Arg Met Glu Ala His Leu Leu Val Ile
130 135 140

Asn Thr Gln Glu Glu Gln Asp Phe Ile Phe Gln Asn Leu Gln Glu Glu
145 150 155 160

Ser Ala Tyr Phe Val Gly Leu Ser Asp Pro Glu Gly Gln Arg His Trp
165 170 175

Gln Trp Val Asp Gln Thr Pro Tyr Asn Glu Ser Ser Thr Phe Trp His

180 185 190

Pro Arg Glu Pro Ser Asp Pro Asn Glu Arg Cys Val Val Leu Asn Phe
195 200 205

Arg Lys Ser Pro Lys Arg Trp Gly Trp Asn Asp Val Asn Cys Leu Gly
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Pro Gln Arg Ser Val Cys Glu Met Met Lys Ile His Leu
225 230 235

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<213> Artificial Sequence

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<223> basic unit of a linking peptide

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<223> primer

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<211> 24
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<220>
<223> primer

<400> 8
tagctttcta caacggtgga tgcc 24

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<213> Homo sapiens

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Asn Cys Ser Val
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Asn Ser Ser Tyr
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<210> 11
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<400> 11

Asn Val Thr Phe
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<400> 12

Asn Glu Ser Leu
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<213> Homo sapiens

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Asn Glu Ser Ser
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Lys Arg Leu Ser
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Lys Lys Thr Thr
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Thr Arg Glu Glu
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Ser Ser Glu Glu
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Ser Thr Lys Glu
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Ser Thr Ser Glu
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Thr Glu Ala Glu

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Ser Ile Cys Glu
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Thr Tyr Ala Glu
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Thr Thr Lys Glu
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Thr Thr Leu Glu
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Ser Trp Gln Asp
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Ser Glu Lys Asp
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Thr Gln Glu Glu
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<223> Tyrosine kinase phosphorylation site in human BDCA-2

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<400> 29

Ser Val Cys Glu
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<210> 30
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<400> 30

Ser Val Cys Glu
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<210> 31
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<212> PRT
<213> Mus musculus

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<222> (1)..(9)
<223> Tyrosine kinase phosphorylation site in mouse dectin-2

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<210> 32
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<212> PRT
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<400> 32

Gly Gly Arg Arg
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<210> 33
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<213> Mus musculus

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<222> (1)..(6)
<223> N-myristylation site in mouse dectin-2

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Gly Val Cys Trp Thr Leu
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<213> Mus musculus

<220>
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<223> N-myristylation site in mouse dectin-2

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Gly Thr Met Val Ser Glu
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<223> N-myristylation site in mouse dectin-2

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Gly Cys Cys Pro Asn His
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<210> 36
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<212> PRT
<213> Homo sapiens

<220>
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<222> (1)..(6)
<223> N-myristylation site in human DCIR

<400> 36

Gly Ile Asn Thr Ala Ser
1 5

<210> 37
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<212> PRT
<213> Unknown

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<223> consensus ITIM motif

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<222> (2)..(5)
<223> consensus immunoreceptor tyrosine-based inhibitory motif
(ITIM motif) (I/V)XYXX(L/V),
amino acid "X" from position 2, 4 and 5 can be any amino acid

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<222> (1)..(1)
<223> amino acid "X" at position 1 can be either amino acid "I " or "V"

<220>

<221> misc_feature

<222> (6)..(6)
<223> amino acid "X" at position 6 can be either amino acid "L " or "V"

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Xaa Xaa Tyr Xaa Xaa Xaa
1 5

<210> 38
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<212> PRT
<213> Homo sapiens

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<221> UNSURE
<222> (1)..(6)
<223> immunoreceptor tyrosine-based inhibitory motif (ITIM motif) in DCIR

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Ile Thr Tyr Ala Glu Val
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